## **ABSTRACT**

The invention provides a transmission latency measurement method which measures a transmission latency between a first data transmitting device and a second data transmitting device interfacing to each other by using three kind of signal patterns A, B, and C. When the signal pattern A is received, a transmitting signal is modified to the second signal pattern B. When the signal pattern B is received, a transmitting signal is modified to the signal pattern C. When the signal pattern C is received, a transmitting signal is modified to the signal pattern A. The transmission latency is measured by transmitting and receiving a signal between the first data transmission device and the second data transmission device so that when any one of the signal patterns A, B, and C is not detected among the received signals or when two or more signal patterns are synchronously detected among the signal patterns A, B, and C, a signal pattern of a transmitting signal existing immediately before is maintained, thereby realizing a transmission path latency measurement method which can easily measure the transmission latency on the digital transmission path not requiring a preparation work for the measurement between two data transmission devices, a complicated protocol or another synchronization device.